REMARKS

This Amendment and Response and the following remarks are intended to fully respond to the Non-Final Office Action mailed May 13, 2008. In that Office Action, claims 1-7 and 20-26 were examined and all were rejected. More specifically, claims 20-23 were rejected under 35 U.S.C. § 101 because, according to the Examiner, the claimed invention is directed to non-statutory subject matter. Claims 1-7 and 20-24 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. Claims 1-4, and 20-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,245,607 to Caram (hereinafter, "Caram"). Claims 5 and 6 were rejected under 35 U.S.C. 103(a) as being unpatentable over Caram in view of U.S. Patent No. 6,779,038 to Minyard (hereinafter, "Minyard"). Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Caram in view of U.S. Patent No. 5,594,872 to Kawano et al. (hereinafter, "Kawano"). Reconsideration of these rejections, as they might apply to the original and amended claims in view of these remarks, is respectfully requested.

In this Amendment and Response, claims 1, 2, 5-7, 20, 22, and 24-25 have been amended. Claims 4, 21, and 26 have been canceled, and claims 40-49 have been added. Claims 40-49 are dependent claims. Claims 8-19 and 27-29 remain canceled, and claims 30-39 remain withdrawn. Therefore, claims 1-3, 5-7, 20, 22-25, and 40-49 remain present for examination.

Interview Summary

Applicants would like to thank Examiner Refai for his time and cooperation in the telephonic interview held on July 23, 2008 with Applicants' Representative, Elizabeth J. Reagan. During the interview, the following topics were discussed: (1) a summary of embodiments; (2) a discussion of the Examiner's 35 U.S.C. §§ 101 and 112 rejections; (3) a discussion of the cited art, e.g., Caram; and (4) proposed claim amendments. No agreement was reached. Again, Applicants would like to thank Examiner Refai for his time and assistance.

Claim Rejections – 35 U.S.C. § 101: Claims 20-23

Claims 20-23 were rejected under 35 U.S.C. § 101 "because the claimed invention is directed to non-statutory subject matter." *Office Action, 05/13/2008 (at p. 3)*. According to the Examiner:

> The claims are directed to a system of *components*. The term 'component' is not defined in the Applicant's specification as statutory subject matter. In fact, the term is not defined at all and is the subject of the below 112 1st rejection for being new matter. Since there is no novel meaning, the 'plain meaning' must be given (see MPEP 2111.01). Merriam-Webster defines the term as '*a constituent part*'. Therefore, the use of the term in the claims merely suggests a system with constituent parts, which are not limited to statutory subject matter.

Office Action, 05/13/2008 (at p. 3) (emphasis in original).

The Applicants respectfully disagree with this § 101 rejection of claims 20-23 based on the use of the term "component." First, the Specification expressly uses the term "component." For example, the Specification provides: "*FIG. 4 illustrates the functional components* related to disseminating broadcast information to multiple nodes. . . ." *Specification (at [0041]) (emphasis added)*. The Applicants emphasize that this particular reference to the Specification is provided for example purposes only and should in no way be construed as limiting. Second, as consistent with embodiments herein, the term "component" can be a term of art known to those of ordinary skill in the art. However, in the interest of forwarding this application to allowance, the Applicants have amended claim 20 to recite:

> A computer system for disseminating information between nodes in a distributed network of nodes comprising:
> at least one processor; and
> memory coupled with and readable by the processor and comprising a series of instructions that, when executed by the processor, cause the processor, for each node, to . . . .

Claim 20, supra (as amended).

These amendments should in no way be construed as an agreement with the Examiner's §101 rejections. These amendments are made in the interest of forwarding this application to allowance. In light of these amendments, the Applicants respectfully request reconsideration of

the rejection to claim 20. Claims 22-23 depend from base claim 20 (claim 21 has been cancelled). Accordingly, reconsideration of the Examiner's § 101 rejections to claims 20 and 22-23 is respectfully requested.

Claim Rejections – 35 U.S.C. § 112: Claims 1-7 and 20-24

Claims 1-7 and 20-24 were rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the written description requirement. According to the Examiner:

> The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. Claims 1, 20, and 24 have been amended to include the limitations *"the nodes are connected by one or more types of computer system relationships"* and *"two or more but less than all"* which is not supported by the Applicant's specification. Citations of the specific portions of the specification that support these limitations as well as explanation of those citations are respectfully solicited.

Office Action, 05/13/2008 (at p. 3) (emphasis in original).

First, the Applicants respectfully disagree that *"the nodes are connected by one or more types of computer system relationships"* is not supported by the Applicants' Specification. For example, the Specification states: "In accordance with particular aspects, the present invention relates to a system and method for the dissemination of information to a plurality of nodes, the nodes connected in a network environment." *Specification (at [0009]).* Further, and for example, Figure 1 shows "[t]he environment 100 has at least one computer system 102 and potentially other computer systems such as 104, 106, 108, 110, and 112, wherein the various computer systems are referred to as nodes." *Specification (at FIG. 1 & [0022]).* These cites to the Specification are offered by way of example only and should in no way be construed as limiting. However, in the interest of forwarding this application to allowance, the Applicants have amended the claim language to read "such that the nodes are connected <u>and distributed across the network</u> . . ." in claims 1 and 20. In light of these amendments, the Applicants respectfully request reconsideration of the rejections to claims 1 and 20. Claims 2-3, 5-7, and 22-23 depend on claims 1 and 20, respectively. Accordingly, the Applicants also respectfully request reconsideration of the rejections to claims 2-3, 5-7 and 22-23.

Second, the Applicants respectfully disagree that *"two or more but less than all"* is not supported by the Applicants' Specification. The Applicants maintain their previous arguments with respect to the Examiner's previous rejection of this claim language. *See, e.g., Amendment and Response to Final Office Action, dated December 13, 2007, (at pp. 8-9).* Further, the Applicants add the following and point the Examiner to the following language in the Specification as a further example of the Specification support for this claim language: "In accordance with other aspects, the present invention relates to the use and creation of a partial view that has address information for *a plurality of nodes on the network, but less than all nodes on the network.*" *Specification (at [0010]) (emphasis added).* A "plurality of nodes" covers, for example, "two or more." Further, the Specification expressly uses the claim language "but less than all." *See id.* For example, the Specification also provides: "Within the environment shown in FIG. 1, according to the present invention, each node 102, 104, 106, 108, 110 and 112 maintains a partial view of the environment 100, i.e., a list of identifying information for *less than all the nodes* in the environment 100. . . . maintain list or sets of information related to other nodes in the environment wherein each set of information relates to *less than all of the nodes* in the environment 100." *Specification (at [0025]) (emphasis added).* The Applicants emphasize that these particular references to the Specification are offered by way of example only and should in no way be construed as limiting. However, in the interest of furthering this application to allowance, the Applicants have amended the relevant claim language to remove the term "other." In light of these arguments and amendments, the Applicants respectfully request reconsideration of the Examiner's § 112 rejections of claims 1 and 20. Claims 2-3, 5-7 and 22-23 depend on amended claims 1 and 20, respectively. Accordingly, reconsideration of the Examiner's rejections to claims 1-3, 5-7, 20 and 22-23 is respectfully requested.

Claim Rejections – 35 U.S.C. § 102(b): Claims 1-4 and 20-26

Claims 1-4 and 20-26 were rejected under 35 U.S.C. § 102(b) as being anticipated by Caram. The Applicants respectfully disagree and traverse the rejections. To anticipate under 35 U.S.C. § 102(b), a single prior art reference must show each and every limitation of the claimed invention. *See, e.g., Massey v. Del Lab.*, 118 F.3d 1568, 1573 (Fed. Cir. 1997). Caram fails to teach each and every aspect of the claim elements. Further, in the interest of forwarding this

application to allowance, the Applicants have provided further claim amendments. Accordingly, the application is in condition for allowance, and Applicants respectfully request such action.

Embodiments herein provide for the dissemination of information throughout a network environment, in which a node within such environment disseminates information to nodes within its *partial view* or, according to some embodiments, to a subset of nodes within the node's *partial view*. In an embodiment, a node receives a message to be broadcasted to nodes in the distributed system. The node then sends the received message to a node(s) identified in the node's partial view. In an aspect of an embodiment, the partial view resides locally on the node and identifies some, but not all, of the other network nodes. Further, other node(s) in the distributed network maintain a partial view and disseminate information to node(s) identified in the nodes' respective partial views. Independent claim 1 recites, for example, "partial view" and "delivering the message to only nodes identified in the partial view." *See claim 1 (as amended); see also claims 20, 24-25 (as amended).* In an embodiment, the Specification states, "Importantly, the partial view does <u>not</u> contain a list of all other nodes on the network." *Specification (at [0033]) (emphasis added).* Claim 1 recites, among other elements:

> for the first node, creating a partial view, wherein the partial view is specific to the first node and resides locally to the first node, and identifies any two or more but less than all nodes on the network such that the nodes are connected and distributed across the network and such that the partial view comprises address information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes;
> evaluating the received message;
> determining if the received message has been previously received by the first node; and
> if the received message has not been previously received, delivering the message to only nodes identified in the partial view of the first node.

See Claim 1, supra (as amended).

Similarly, claims 20, 24, and 25 recite, among other elements:

> [Claim 20]
> store information related to other nodes in a partial view, wherein the partial view is specific to each node and identifies any two or more but less than

all nodes on the network such that the nodes are connected and distributed across the network and such that the partial view comprises address information for at least one of the nodes in the partial view, and wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of the message being sent to all nodes;

. . .

[Claim 24]
each node maintaining a partial view of the entire network, such that the partial view identifies any two or more but less than all nodes on the network such that the nodes are connected and distributed across the network and such that the partial view comprises address information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of a message being sent to all nodes;

. . .

[Claim 25]
wherein the first and second identification fields represent a partial view of the network environment, wherein the partial view identifies any two or more but less than all nodes on the network such that the nodes are connected and distributed across the network and such that the partial view comprises address location information for at least one of the nodes in the partial view, wherein the number of nodes identified in the partial view is determined in order to provide a determined probability of a message being sent to all nodes. . . .

See claims 20 and 24-25, supra (as amended).

While the Examiner argues that "Caram teach[es] that each node contains a dynamically formulated routing table of neighboring nodes, which is a portion of the network nodes," *Office Action, 05/13/2008 (at pp. 2 & 4)*, the Applicants respectfully disagree. Caram's routing table does not teach a "portion of the network nodes." To the contrary, *all* of the nodes in the network are included in the routing table as shown by a comparison of FIG. 1 of Caram with FIGS. 5 and 6 of Caram. FIG. 1 of Caram shows all of the nodes in the network, namely nodes 1, 2, 5, 6, 7, and 8. The description of FIG. 1 explicitly shows that the network consists of the nodes 1, 2, 5, 6, 7 and 8: "FIG. 1 shows in block diagram form a data network comprising **a plurality of nodes 1 and 2 and 5 through 8** interconnected via respective communication links (paths) 101 through 107." *Caram (at 2:1-6) (emphasis added).* Turning to FIGS. 5 and 6, these figures show the routing tables for nodes 1 and 2. **Each of these tables shows nodes 1, 2, 5, 6, 7 and 8.** *See Caram (at FIGS. 5 & 6).* Thus, the routing table taught by Caram comprises *all* of the nodes in the network, and *not* a portion of the network nodes. Indeed, by including *all* of the nodes in the

network, Caram teaches away from the "partial view" of embodiments herein. Caram uses the routing table to "control the routing of connectionless broadcast messages to destination nodes." *Caram (at 4:30-31).* The routing table of Caram, unlike the partial view as claimed, does not, among other elements, identify "any two or more but less than all nodes on the network." Rather, Caram identifies all nodes on the network and then indicates the routing of messages with respect to those nodes: "Specifically, and referring to both FIGS. 1 and 5, routing table 501 indicates at line 502 that node 1 accepts broadcast messages received via link 102 only if the broadcast messages originated by nodes 2, 7 or 8, and rejects all other broadcast messages. . . . In addition, table 501 indicates at line 503 that node 1 would transmit over link 102 broadcast messages originated by nodes 1, 5 or 6, in which such messages may be received over one of the other links, 105 or 101. Similarly, and as indicated at line 504, node 1 accepts broadcast messages received via link 105 only if the messages are originated by node 5, and transmits over link 105 broadcast messages that are originated by node 1, 2 or 7 only, as indicated at line 505." *Caram (at 4:32-47).* Thus, the nodes of Caram have a *full* view of the network of nodes for message transmittal, and the routing table lists *all network nodes* with the particular links and actions for the nodes. *See Caram (at FIGS. 5 & 6).* Caram thus does not teach, among other elements, the "partial view" of claims 1, 20, and 24-25.

While the above discussion shows that Caram does not teach the elements of claims 1, 20, and 24-25 as discussed above, amendments to the claims are made in the interest of forwarding this application to allowance and are not necessarily made to address the Office Action's rejections based on the cited references and are therefore made without prejudice. Because Caram fails to teach a "partial view," it also fails to teach, for example, that the "partial view comprises address information for at least one of the nodes in the partial view" or, for further example, claim 1's "if the received message has not been previously received, delivering the message to only nodes identified in the partial view of the first node" or, for example, claim 20's "transmit broadcast information to only nodes identified in the partial view if the received message has not been previously received by the first node." *See also claims 24-25, supra (as amended).*

Because Caram fails to teach, among other elements, the "partial view" of the network nodes as recited in claims 1, 20 and 24-25 and as shown *supra*, Caram fails to anticipate each and every claimed limitation. For at least the reasons presented above, claims 1, 20 and 24-25

are therefore allowable. Dependent claims 2-3, 5-7, 22-23, and 40-49 are also believed to be allowable for reciting further limitations of claims 1, 20 and 24-25, respectively. Accordingly, the Applicants respectfully request allowance of claims 1-3, 5-7, 20, 22-25, and 40-49.

Claim Rejections – 35 U.S.C. § 103(a), Caram in view of Minyard

Claims 5 and 6 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Caram in view of Minyard. Because claims 5 and 6 depend from what the Applicants believe is an allowable base claim 1, *see* discussion *supra*, claims 5 and 6 are believed to be patentable over Caram in view of Minyard. As such, any remaining arguments supporting the rejections of claims 5 and 6 are not acquiesced to even though they are not addressed herein. Further, Caram in view of Minyard fails to teach or disclose, among other elements, the "partial view" as discussed above. *See, e.g., claim 1*. The Applicants thus respectfully request reconsideration of the rejections to claims 5 and 6 in light of the arguments presented above.

Claim Rejections – 35 U.S.C. § 103(a), Caram in view of Kawano

Claim 7 was rejected under 35 U.S.C. § 103(a) as being unpatentable over Caram in view of Kawano. Because claim 7 depends from what the Applicants believe is an allowable base claim 1, *see* discussion *supra*, claim 7 is believed to be patentable over Caram in view of Kawano. As such, any remaining arguments supporting the rejection of claim 7 are not acquiesced to even though they are not addressed herein. Further, Caram in view of Kawano fails to teach or disclose, among other elements, the "partial view" as discussed above. *See, e.g., claim 1*. The Applicants thus respectfully request reconsideration of the rejection to claim 7 in light of the arguments presented above.

Conclusion

This Amendment and Response fully responds to the Non-Final Office Action mailed May 13, 2008. It is recognized that the Office Action may contain arguments and rejections that are not directly addressed by this Amendment and Response due to the fact that they are rendered moot in light of the preceding arguments in favor of patentability. Hence, the failure, if any, of this Amendment and Response to directly address an argument raised by the Examiner

should not be interpreted as reflecting the Applicants' belief that such argument has merit. Furthermore, the claims of the present application may include other elements, not discussed in this Amendment and Response, which are not shown, taught, or otherwise suggested by the art of record. Accordingly, the preceding arguments in favor of patentability are advanced without prejudice to other bases of patentability.

It is believed that no further fees are due with this Amendment and Response to the Non-Final Office Action. However, the Commissioner is hereby authorized to charge any deficiencies or credit any overpayment with respect to this patent application to deposit account number 13-2725.

In light of the above remarks and amendments, it is believed that the application is in condition for allowance, and such action is respectfully requested. Should any additional issues need to be resolved, the Examiner is requested to telephone the undersigned to attempt to resolve those issues.

Respectfully submitted,

MERCHANT & GOULD P.C.

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